

Report type:	Neuroreader® Report	Analysis date	2021-Jul-30 22:58:15
Image ID	pacs_20210730225812	Accession Number	IM33029596
Group name	PACS-Houston-Methodist	Patient Name	Brockman Robert T
Study ID	38210	BirthDate	[REDACTED]
Clinical image ID	003768603	Gender	Male
Patient ID	003768603	Age	80

Reference Head Size

The measured total intracranial volume (mTIV)	2413 mL
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Left-Right Asymmetry Index

Structures	Asymmetry Index	NR Index*	Z-score	Percentile
Hippocampus	-0.000051	-2.73	-0.18	42.88

Brain Volume Assessment

Structures	Color	Vol ml	Vol/mTIV in (%)	NR Index*	Z-score	Percentile
Whole Brain Matter	n/a	1145.95	47.49	-6.19	-0.41	34.18
Gray Matter	n/a	560.63	23.23	-3.98	-0.26	39.68
White Matter	n/a	585.32	24.26	-0.07	0.00	49.81
Hippocampus	n/a	8.41	0.35	-2.38	-0.16	43.78
Right Hippocampus	Green	4.32	0.18	-1.70	-0.11	45.54
Left Hippocampus	Blue	4.10	0.17	-3.10	-0.20	41.93
Amygdala	n/a	2.70	0.11	-6.00	-0.39	34.64
Right Amygdala	Yellow	1.38	0.06	-5.30	-0.35	36.37
Left Amygdala	Cyan	1.31	0.05	-5.84	-0.38	35.04
Putamen	n/a	8.15	0.34	-6.96	-0.46	32.35
Right Putamen	Magenta	4.25	0.18	-5.10	-0.34	36.85
Left Putamen	Orange	3.90	0.16	-8.59	-0.57	28.59
Thalamus	n/a	18.34	0.76	-5.94	-0.39	34.80
Right Thalamus	Green	9.44	0.39	-4.19	-0.28	39.13
Left Thalamus	Green	8.90	0.37	-7.68	-0.51	30.68

Image ID: pacs_20210730225812
GUDID 05700002060464 Hardware profile 1C

US v. Brockman
DX-44
Case No: 4:21-cr-0009

NR 2.6.0
Page 1 out of 6

Structures	Color	Vol ml	Vol/mTIV in (%)	NR Index*	Z-score	Percentile
Ventral Diencephalon	n/a	9.50	0.39	-10.17	-0.67	25.18
Right Ventral Diencephalon	Blue	4.57	0.19	-10.35	-0.68	24.80
Left Ventral Diencephalon	Magenta	4.93	0.20	-8.80	-0.58	28.13
Pallidum	n/a	3.27	0.14	-3.37	-0.22	41.23
Right Pallidum	Purple	1.61	0.07	-2.71	-0.18	42.93
Left Pallidum	Dark Red	1.67	0.07	-3.71	-0.24	40.37
Caudate	n/a	8.11	0.34	-3.17	-0.21	41.75
Right Caudate	Green	4.22	0.17	-1.95	-0.13	44.91
Left Caudate	Dark Blue	3.90	0.16	-4.45	-0.29	38.49
Brain Stem	Yellow	21.38	0.89	-4.31	-0.28	38.85
Frontal Lobe	n/a	384.60	15.94	-8.06	-0.53	29.80
Right Frontal Lobe	Yellow/Green	192.38	7.97	-7.65	-0.50	30.74
Left Frontal Lobe	Teal/Pink	192.22	7.97	-8.27	-0.54	29.33
Parietal Lobe	n/a	210.04	8.70	-5.91	-0.39	34.86
Right Parietal Lobe	Green/Purple	101.56	4.21	-7.71	-0.51	30.59
Left Parietal Lobe	Blue/Red	108.48	4.50	-3.99	-0.26	39.65
Occipital Lobe	n/a	110.16	4.57	-0.48	-0.03	48.73
Right Occipital Lobe	Blue/Red	60.80	2.52	5.01	0.33	62.90
Left Occipital Lobe	Cyan/Green	49.36	2.05	-6.19	-0.41	34.19
Temporal Lobe	n/a	200.16	8.30	-10.83	-0.71	23.80
Right Temporal Lobe	Red/Purple	96.62	4.00	-11.77	-0.77	21.94
Left Temporal Lobe	Pink/Yellow	103.54	4.29	-9.31	-0.61	27.02
Cerebellum	n/a	149.90	6.21	-0.48	-0.03	48.75
Right Cerebellum	Blue/Orange	75.00	3.11	-0.79	-0.05	47.94
Left Cerebellum	Cyan/Red	74.90	3.10	-0.16	-0.01	49.57
CSF (+ dura)	Purple	645.11	26.74	2.07	0.14	55.42
Lateral Ventricle	n/a	99.60	4.13	9.19	0.60	72.74
Right Lateral Ventricle	Light Blue	56.68	2.35	12.34	0.81	79.15
Left Lateral Ventricle	Light Green	42.91	1.78	4.97	0.33	62.83

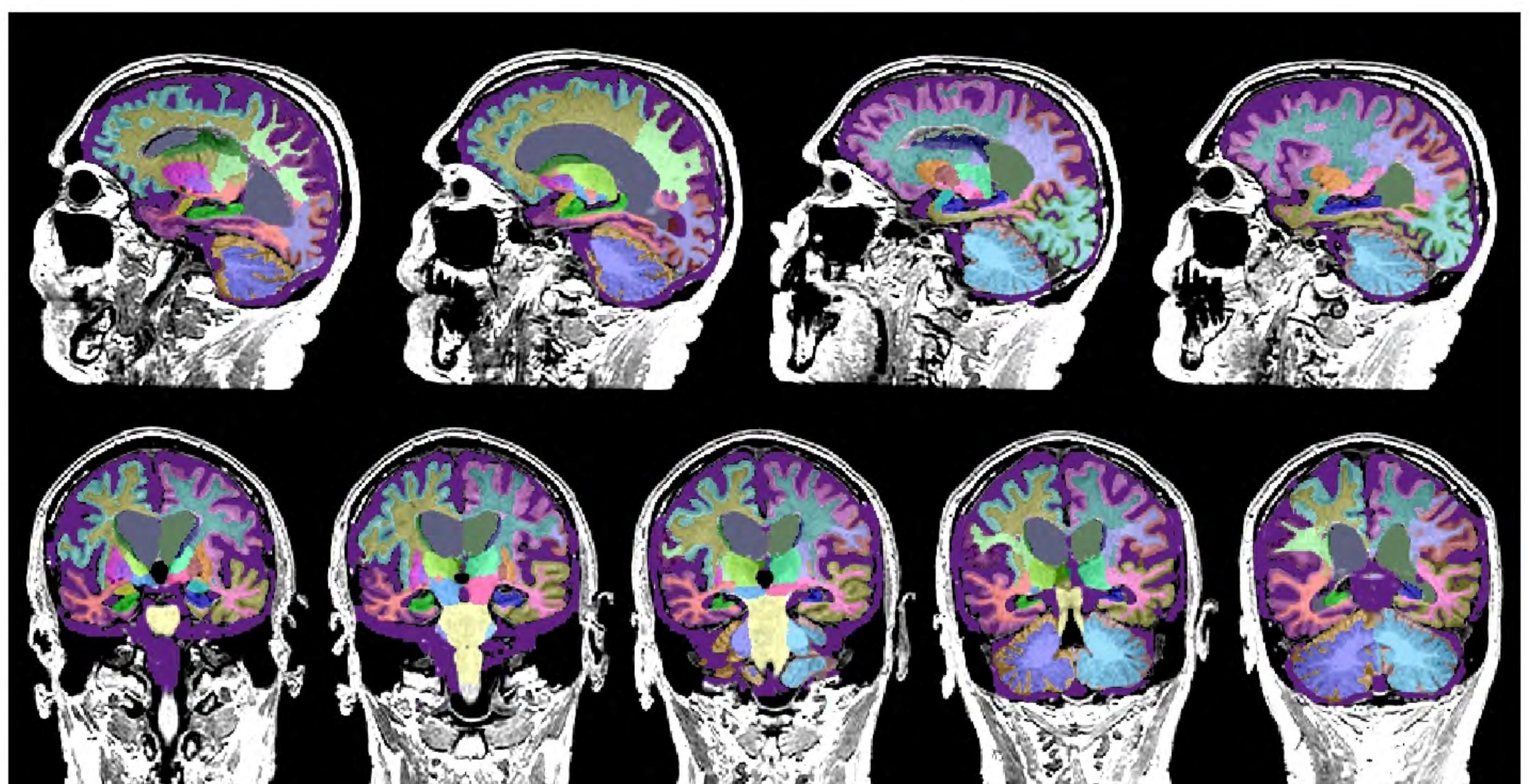
Text with orange color: All brain matter volumes with a percentile lower than 25% and all CSF structures with a percentile over 75%.
*) NR Index: Neuroreader® Index

Summary

All brain matter volumes with a percentile lower than 25% and all CSF structures with a percentile over 75% (orange font):

- Right Ventral Diencephalon (24.80%)
- Temporal Lobe (23.80%)
- Right Temporal Lobe (21.94%)
- Right Lateral Ventricle (79.15%)

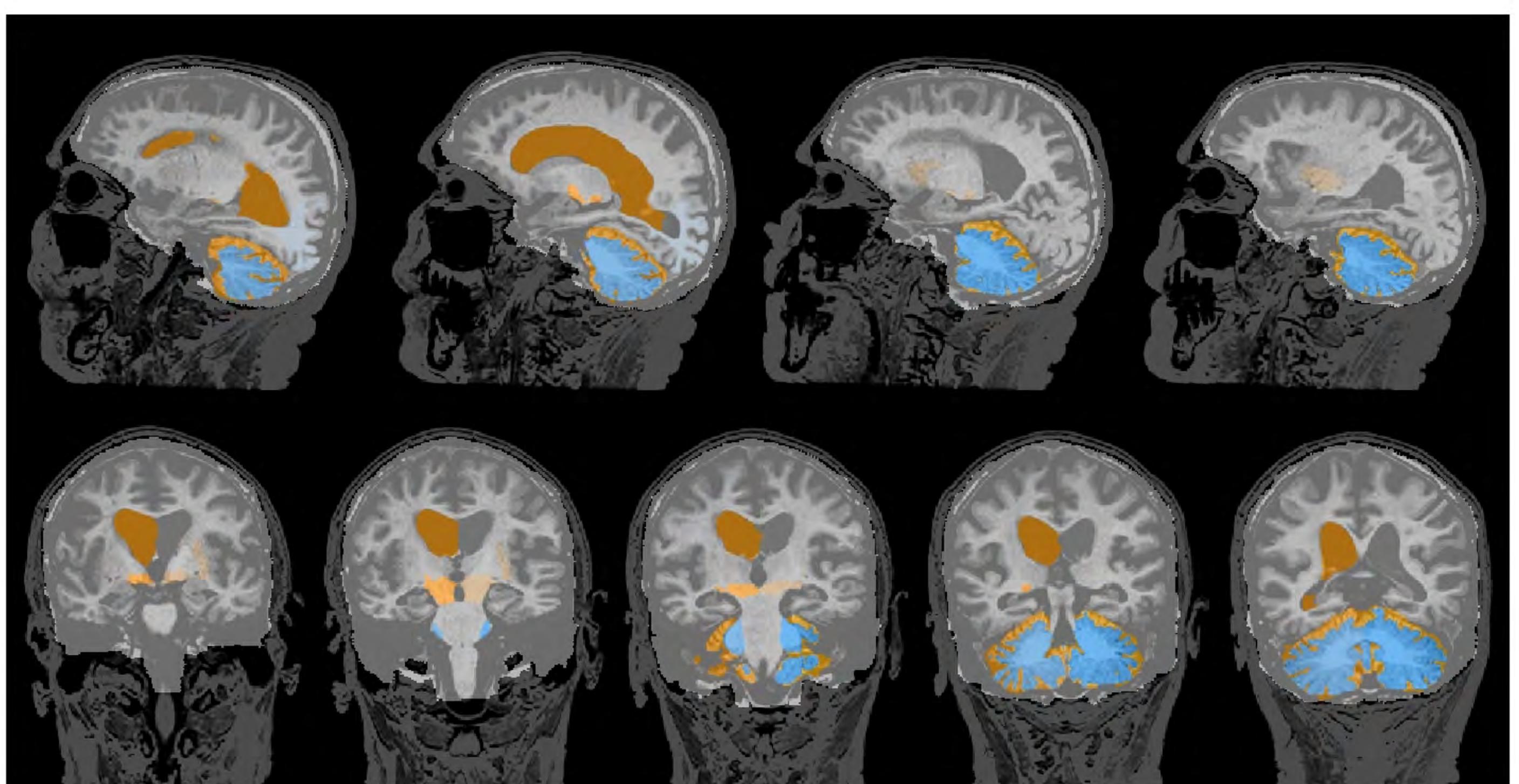
Quality Assessment Overlay Images



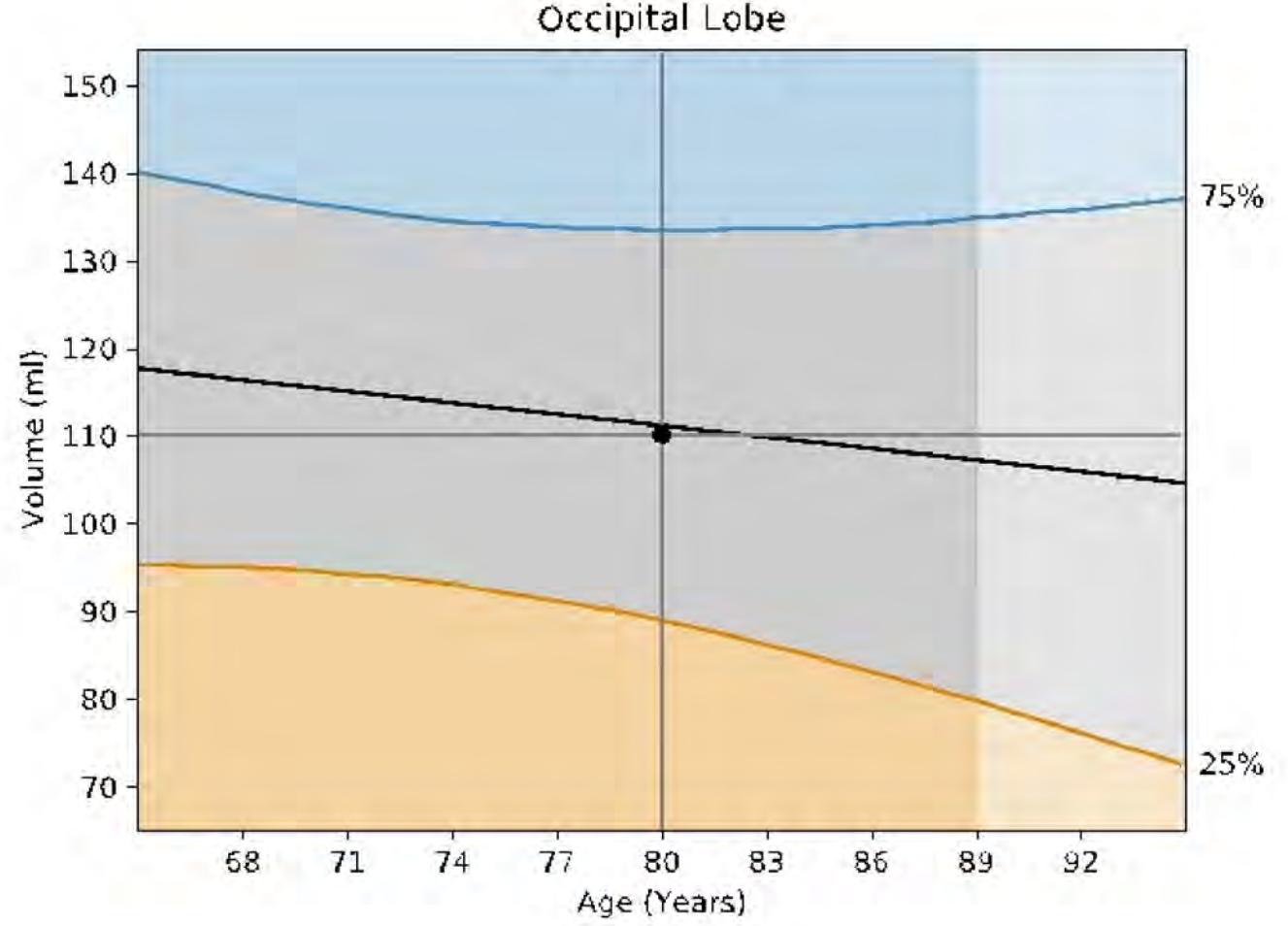
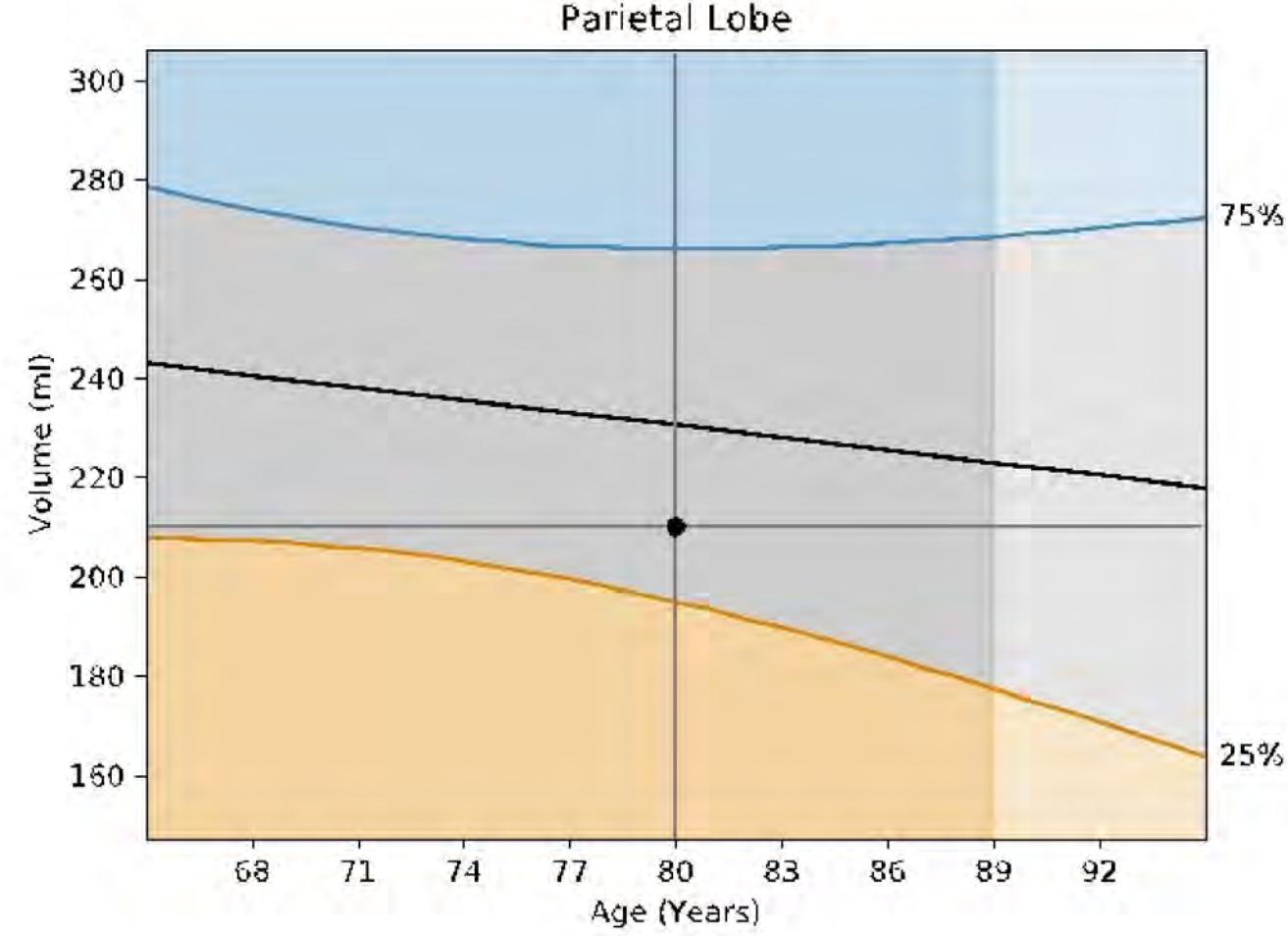
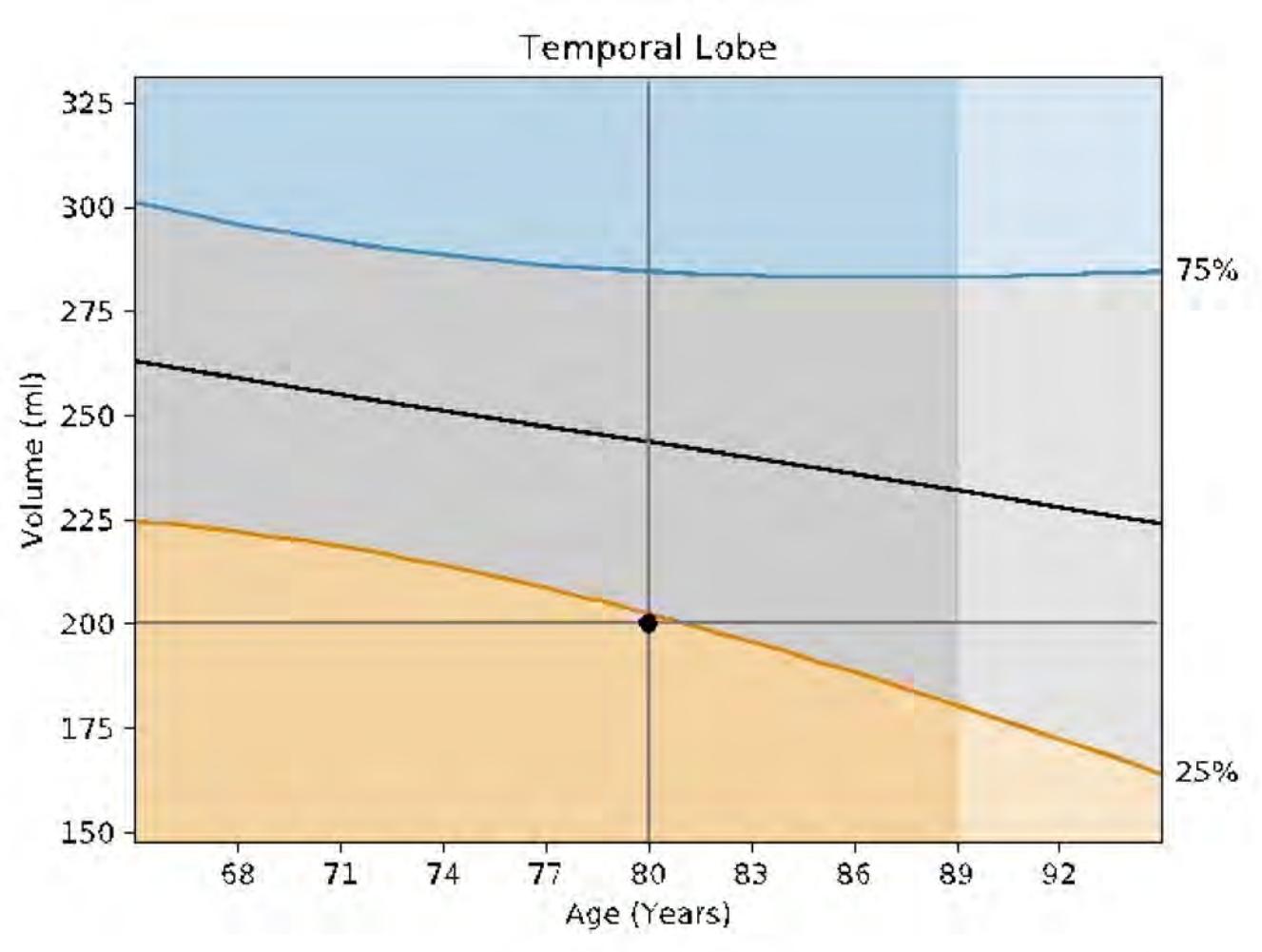
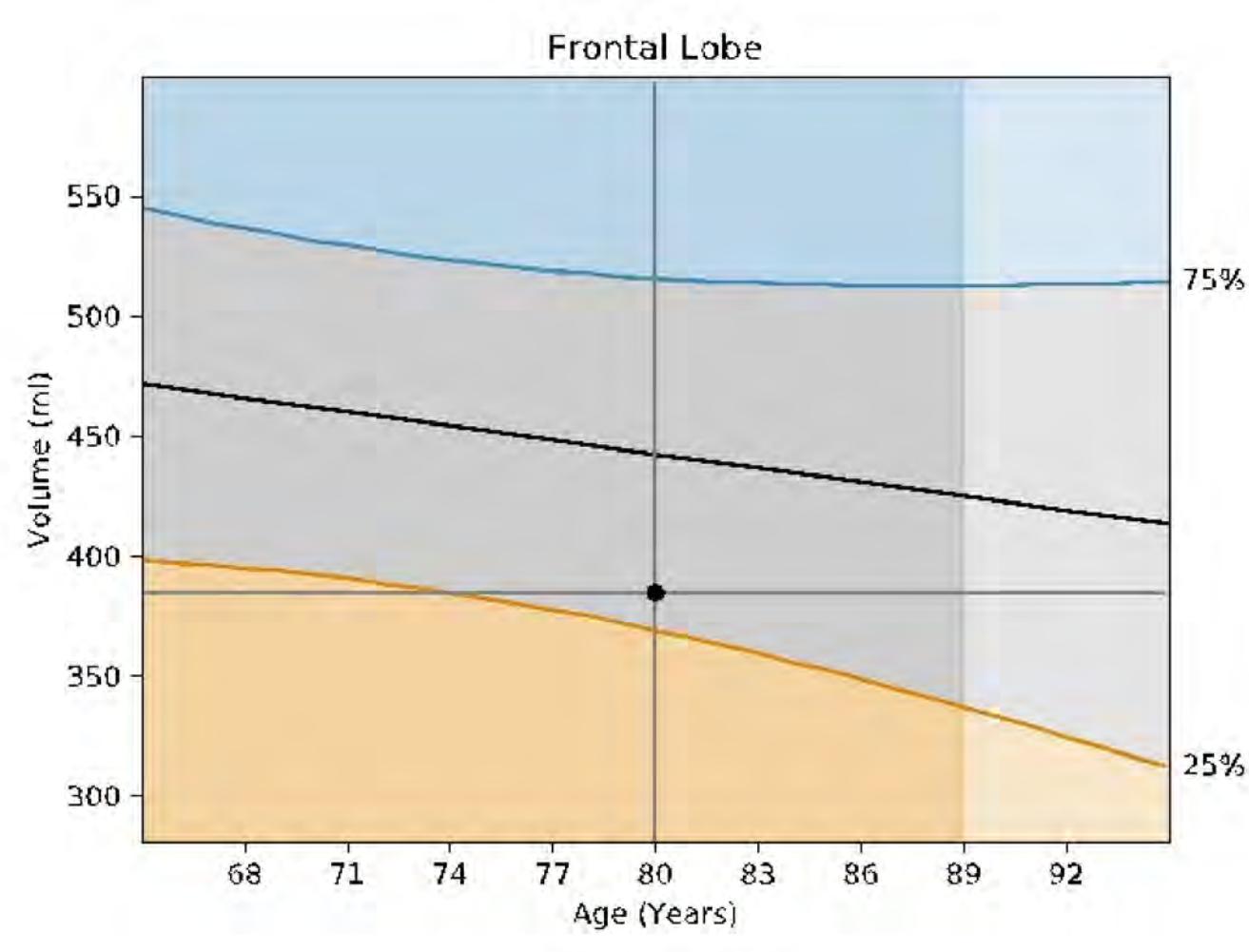
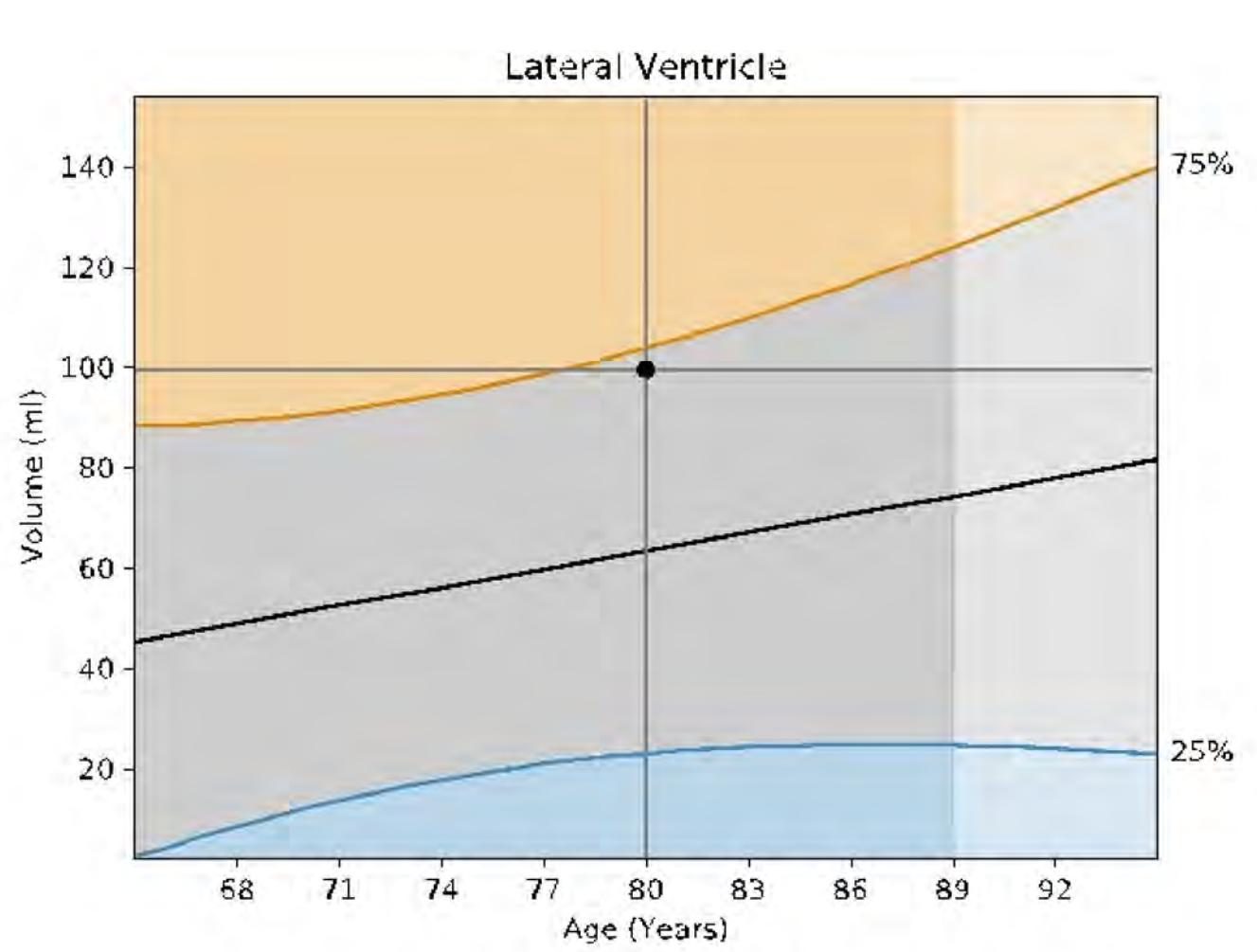
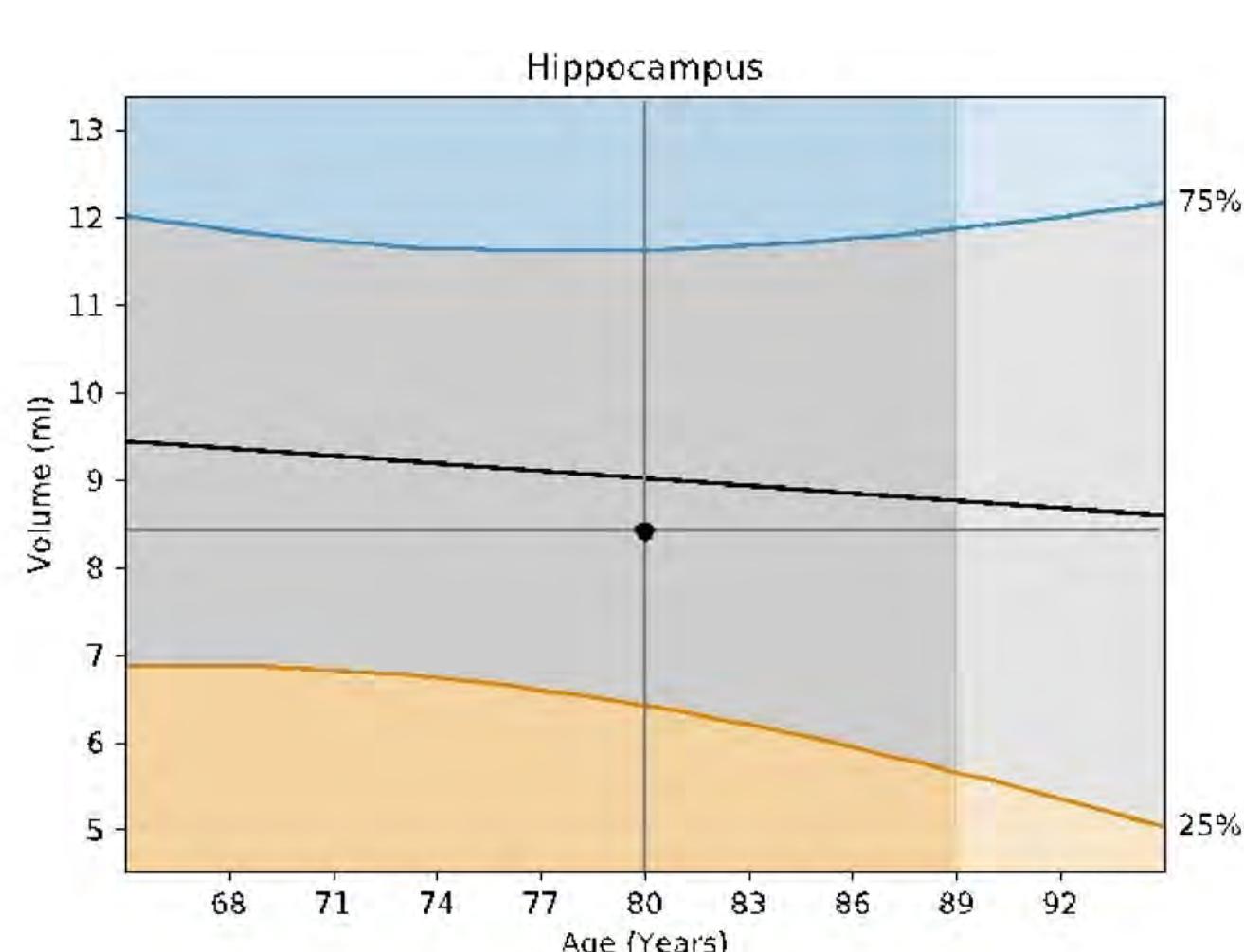
Brain Heat Maps

50%

Statistical percentile for each brain structure shown in a color gradient.
The orange color scale indicates all brain matter volumes with a low percentile and all CSF and ventricular structures with a high percentile.



Charts



Brain Segmentation Color Table

Id	Color	Label	Red	Green	Blue
255	[Red]	Whole Brain Matter	255	0	0
53	[Green]	Right Hippocampus	0	255	0
17	[Blue]	Left Hippocampus	0	0	255
54	[Yellow]	Right Amygdala	255	255	0
18	[Cyan]	Left Amygdala	0	255	255
51	[Magenta]	Right Putamen	255	0	255
12	[Orange]	Left Putamen	255	128	0
49	[Lime Green]	Right Thalamus	128	255	0
10	[Green]	Left Thalamus	0	255	128
60	[Blue]	Right Ventral Diencephalon	0	128	255
28	[Magenta]	Left Ventral Diencephalon	255	0	128
52	[Purple]	Right Pallidum	128	0	255
13	[Dark Red]	Left Pallidum	128	0	0
50	[Green]	Right Caudate	0	128	0
11	[Blue]	Left Caudate	0	0	128
16	[Yellow]	Brain Stem	255	255	128
303	[Cyan]	Right Frontal Lobe GM	128	255	255
302	[Magenta]	Left Frontal Lobe GM	255	128	255
313	[Olive Green]	Right Frontal Lobe WM	128	128	0
312	[Teal]	Left Frontal Lobe WM	0	128	128
305	[Purple]	Right Parietal Lobe GM	128	0	128
304	[Red]	Left Parietal Lobe GM	255	128	128
315	[Lime Green]	Right Parietal Lobe WM	128	255	128
314	[Blue]	Left Parietal Lobe WM	128	128	255
307	[Red]	Right Occipital Lobe GM	192	64	64
306	[Green]	Left Occipital Lobe GM	64	192	64
317	[Blue]	Right Occipital Lobe WM	64	64	192
316	[Cyan]	Left Occipital Lobe WM	64	192	192
309	[Magenta]	Right Temporal Lobe GM	192	64	192
308	[Olive Green]	Left Temporal Lobe GM	192	192	64
319	[Red]	Right Temporal Lobe WM	255	64	64
318	[Magenta]	Left Temporal Lobe WM	255	64	192
47	[Yellow]	Right Cerebellum GM	255	192	64
8	[Pink]	Left Cerebellum GM	255	192	192
46	[Blue]	Right Cerebellum WM	64	64	255
7	[Cyan]	Left Cerebellum WM	64	192	255
24	[Magenta]	CSF (+ dura)	192	64	255
43	[Light Blue]	Right Lateral Ventricle	192	192	255
4	[Lime Green]	Left Lateral Ventricle	192	255	192